




911

January 22, 2013

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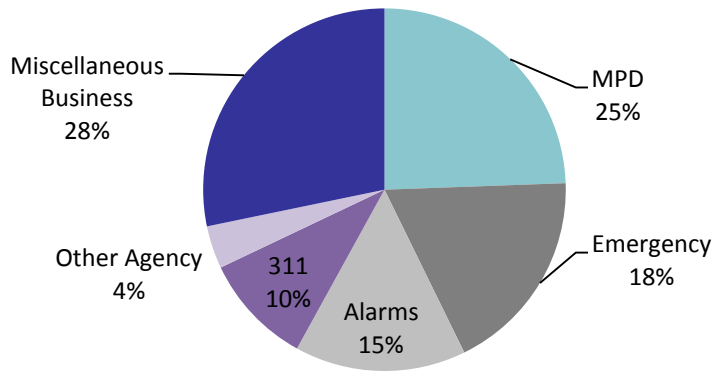
911

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911 At a Glance

Measure	2010	2011	2012
Total Calls Received	589,458	584,386 .8% decrease from 2010	612,838 1.7 % increase from 2011
9-1-1 Calls	424,146 (72% of calls)	461,162 (79% of calls)	497,481 (81% of calls)
10-Digit	165,312 (28% of calls)	123,224 (21% of calls)	115,357 (19% of calls)
Average 911 answer time	6.31 sec	6.15 sec	7.33 sec
Police Dispatches	344,322	339,465	353,580
Fire Dispatches	31,711	34,914	36,754
Priority Call Waiting Time Police (Resource reliant)	1 min 14 sec	1 min 16 sec	1 min 34 sec
Priority Call Waiting Time Fire	18 sec	15.5 sec	15 sec
Complaints	38 received 27 sustained (71%)	36 received 15 sustained (42%)	47 received 26 sustained(55%)
Quality Index	89	91	94

Snapshot: Composition of 10-digit Calls July 15, 2012



Why is this measure important?

The 911 center answers incoming calls on 911 (14 lines) and on the alternate 10-digit lines (7 lines). The 10-digit lines are required by law to provide emergency access for persons who cannot dial 911 for whatever reason.

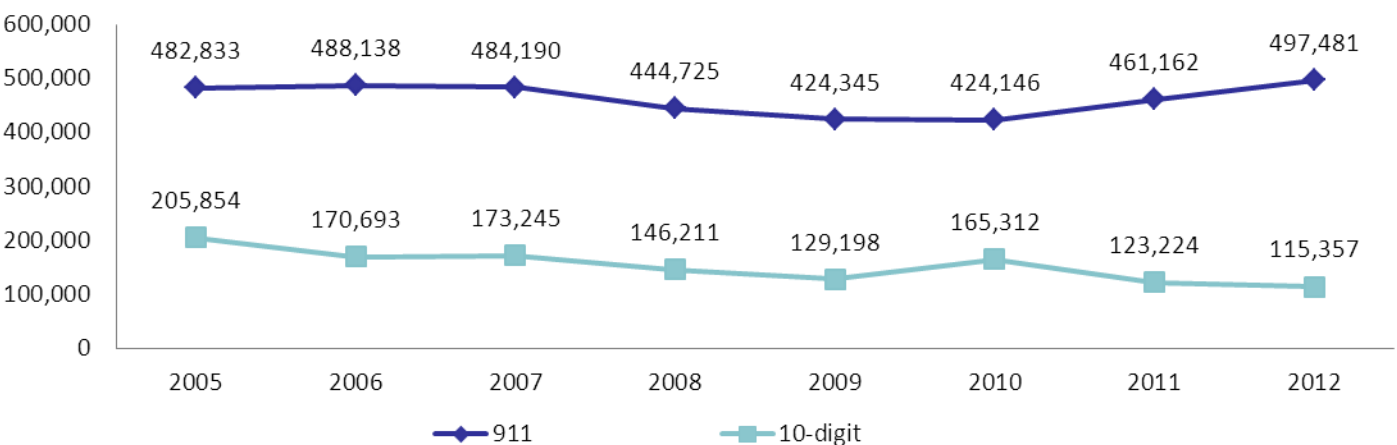
It is difficult to categorize how many 911 or 10-digit calls are actually “emergencies.” Some 911 calls are not emergencies and some 10-digit calls are. We do know that the majority of calls received on the 10-digit lines are “legitimate” calls related to ongoing incidents, inquiries about incidents, calls from other agencies requesting assistance and calls from alarm companies reporting burglar, fire and panic alarms.

What will it take to make progress?

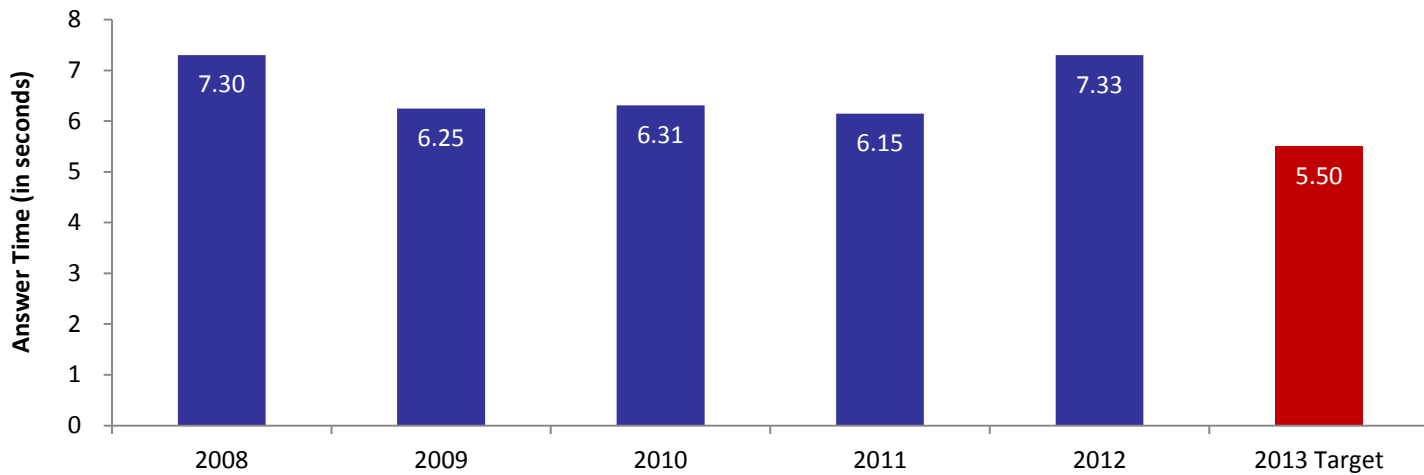
Above shows a snapshot of 131 10-digit calls received during the hours of 1:00 AM – 1:00 PM on Sunday, July 15, 2012 and below shows the 911 and 10-digit call volume charted over an 8-year period. While 10-digit calls have steadily declined since the implementation of 311, the 911 trend is relatively flat, with increases in 2011 and 2012.

We can see that “emergencies” account for 18 percent of calls received on 10-digit lines. The remainder are for the most part emergency response and incident management business that is appropriate for the 911 center to handle. Empirical data suggests that this distribution is typical of the 10-digit calls received; further analysis will provide additional information.

911 and 10-digit Call Volume



911 Answer Time



Why is this measure important?

Callers reporting true emergencies need timely action. All 911 calls are presumed to be emergencies. The national benchmark (a legal standard in 10 states, not including MN) is 90 percent of 911 calls answered within ten seconds. 911 manually calculates the average answer time as the statistical reporting package does not provide this data. Empirical data suggests that average answer within the five to six second range achieves the target.

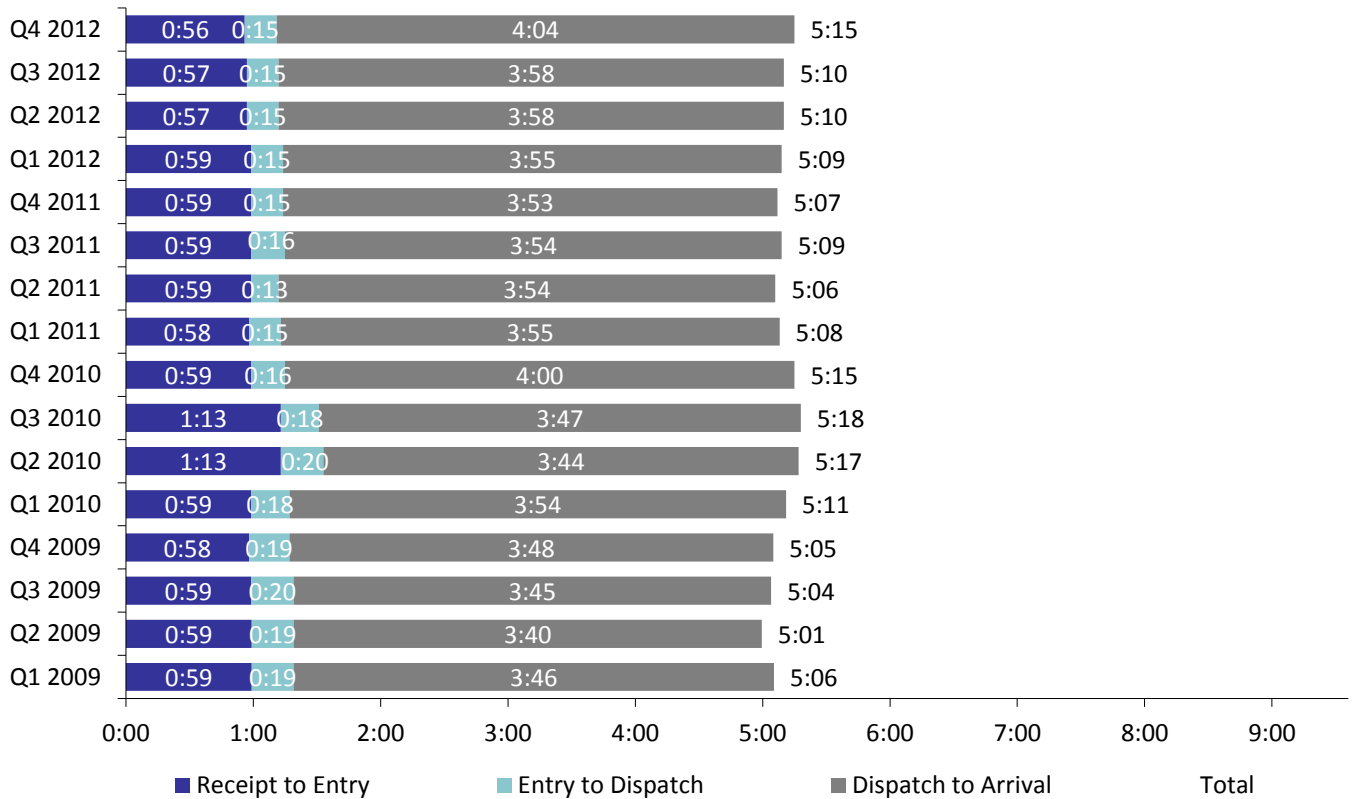
What will it take to achieve the targets?

While individual weeks do achieve the 5.5 target, 911 has yet to sustain the target for a year's duration. 911 has implemented several initiatives to improve efficiency including additional changes to call answering business processes, a strategic staffing initiative that makes use of bell curve staffing and scheduling staff to coincide with known call volumes and using overtime to fill gaps in minimum staffing levels. We also reduced minimum staffing levels to meet budget and decrease overtime. It was expected that without increase staffing, 911 would not be able to meet the target, and the 2012 measure reflects that. 911 will be adding two FTE in 2013 who will be deployed to the highest volume hours of the day.

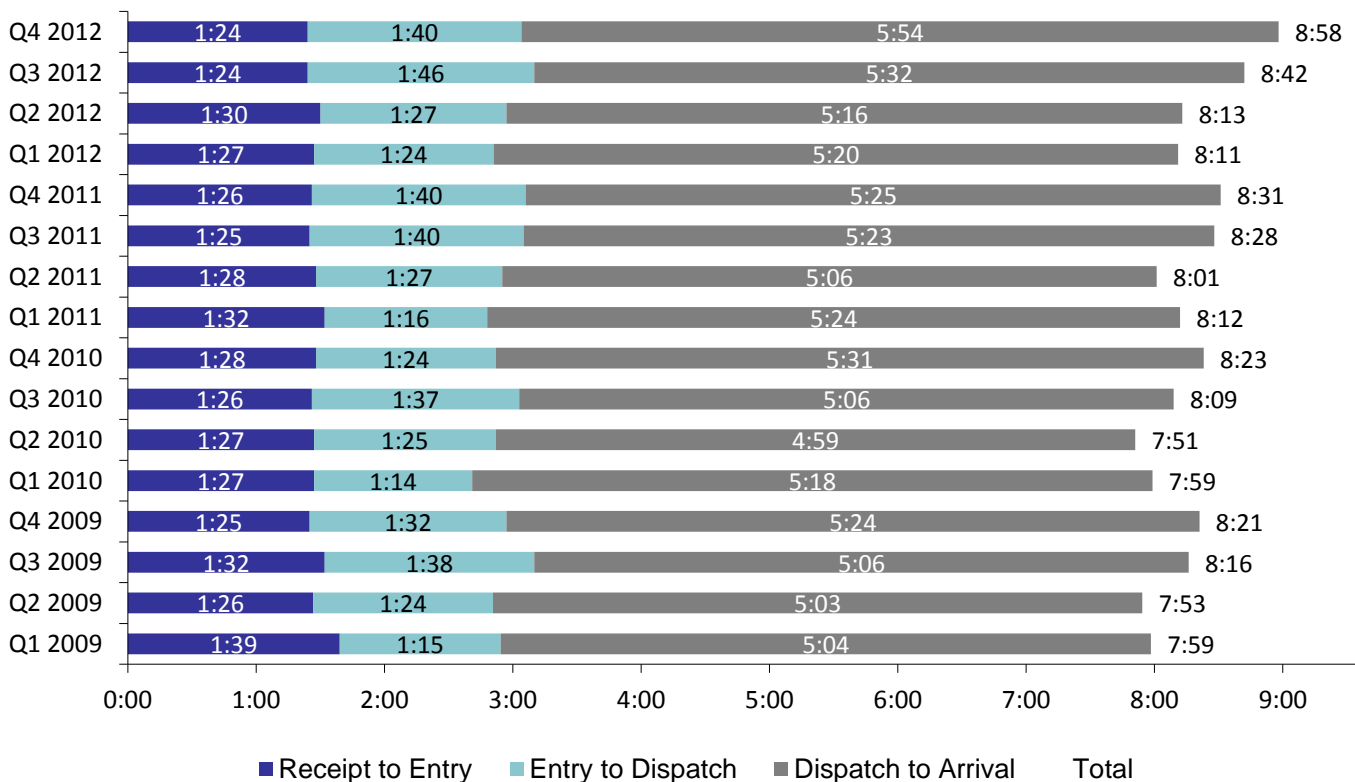
In addition to staffing levels, a factor that directly impacts answer time is talk time. With the increase in wireless calls (now 70 percent of all calls) agents need more time to collect accurate location information. Calls from non-English-speaking persons also affect talk time since they must be conferenced with an interpreter.

New programs implemented in 2012 such as the hands-only CPR initiative and the domestic abuse gun program require agents to gather specific information and take certain actions beneficial to public safety response and prosecution. These additional questions require additional time spent with the caller.

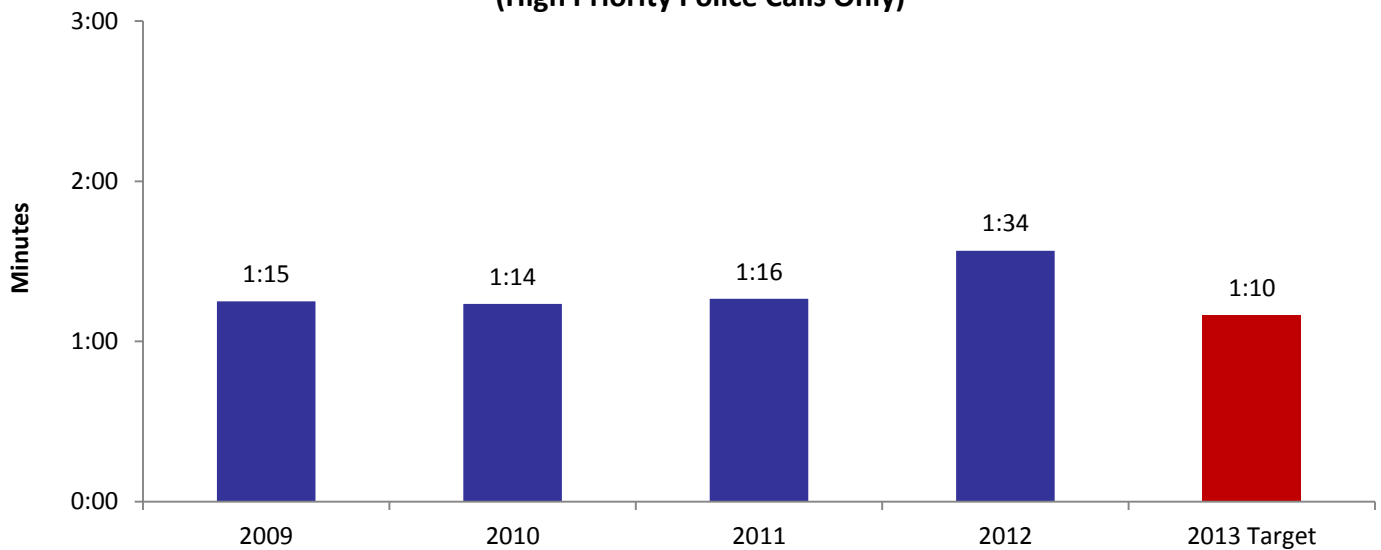
Fire Priority 1 Quarterly Response Time (in minutes)



Police Priority 1 Quarterly Response Time (in minutes)



911 Pending Time* (High Priority Police Calls Only)



* Pending time = elapsed time from CAD entry to dispatch

Why is this measure important?

Pending time is the length of time a call for service waits in the dispatcher's queue before it is dispatched to a response unit. 911 follows the Police Department's Priority Policy, which establishes the maximum pending times for various call priorities (0 – 4). The target pending time for high priority calls (imminent life or property threat) is one minute, 10 seconds.

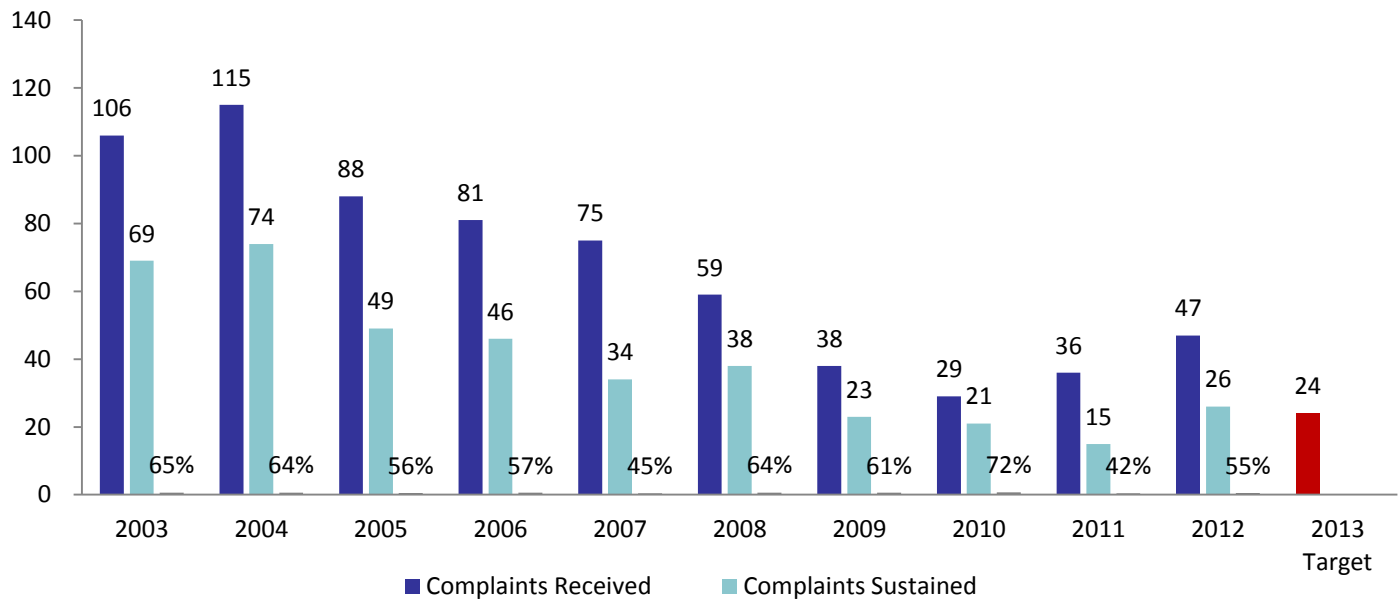
Emergency situations need quick responses to increase the chances of successful outcomes. The 911 Center is the first step in the response, and delays here should be monitored and reacted to. The attached graph shows the data for Police only. As seen on the previous page, Fire's average pending time is 20 - 30 seconds, underscoring the fact that pending times are also largely dependent on the availability of responders (there are "always" fire rigs available; not true for patrol cars).

What will it take to achieve the targets?

The AVL technology introduced with the CAD system in 2007 allows dispatchers to identify and send the closest unit to priority calls. In 2009 we reached the quickest dispatch time of 1 minute 15 seconds. Due to budget reductions in 2010, 911 reduced the minimum number of police dispatchers on duty during certain times of day. This resulted in a slight increase in dispatch times as the dispatchers each handled a greater number of incidents. We see this again in 2012 as 911 is challenged with staffing shortages due to budgetary constraints. Dispatch time is also directly impacted by resource availability: fluctuations in MPD staffing levels have a direct impact on this measure.

With the addition of two FTEs, we expect to make gains in this area and will continue to seek out strategies to address resource challenges and their impacts.

911 Complaints



Why is this measure important?

This is feedback directly from 911 callers (or sometimes internal customers such as PD, FD or Council staff) who have a service concern. Each transaction is crucial; any feedback gathered that provides opportunities for improvement is worthy of careful review. Even complaints that are not sustained can provide valuable information we can use to improve processes, such as managing expectations and providing exceptional customer service. 911 MECC received 47 complaints of service in 2012, 36 of these were from public who interacted with 911 and 11 were internal complaints from partners and other city officials or departments.

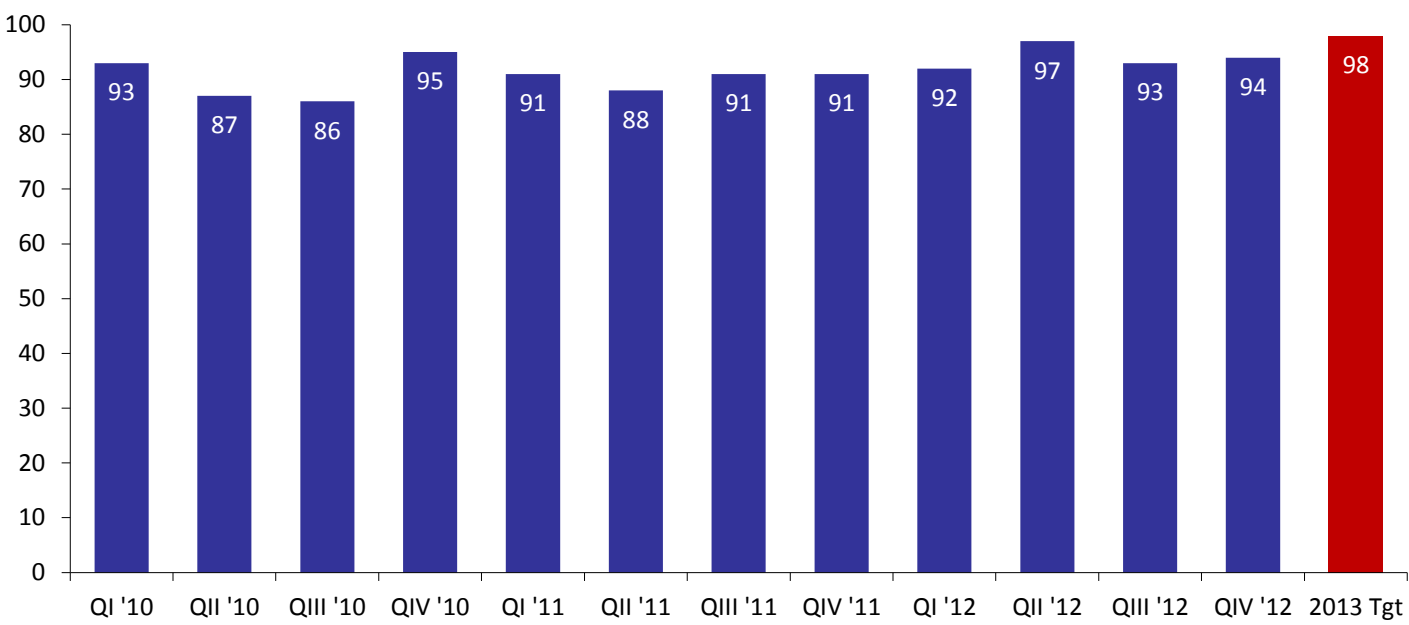
Of the 47 complaints received, 21 were closed unfounded (didn't happen) or exonerated, meaning the action causing the complaint did occur, but was proper and within policy. An example is a complaint where a citizen felt it took too long for police to arrive. The 911 Operator and dispatchers involved may have followed policy but other things such as squad availability affected the amount of time it took for help to arrive. Because all computer aided dispatch records, phone and radio interactions within 911 are recorded, it is extremely rare to have an incident closed due to being unable to determine what occurred.

Of the complaints sustained, the majority (20) were for improper call receipt and 6 were response delays. Improper call receipt complaints are those where the 911 staff failed to meet standards for professionalism and courtesy or made an error in gathering information such as an address error. Sustained response delay complaints are generally those where dispatchers failed to take necessary actions to immediately send help although resources were available.

What will it take to achieve the targets?

We are concerned about the uptick in complaints in 2012, and are taking action through our QA and performance management processes. Staffing shortages can contribute to operator fatigue; 911 calls increased during 2012 as staffing levels decreased. Onboarding staff is a priority in 2013 and the two additional resources will be deployed to the busiest times of day once they are hired and trained.

Quality Service Index (0-100 points)



Why is this measure important?

911 began a quality assurance program in 2007. Through refinement, 911 is now able to present quality service index (QSI) as a performance indicator. Forty five calls per month (15 from each of the three shifts) are graded by a team of 4 people. The team then meets to calibrate the scores and determine a final score for each call. The calibrated scores are averaged to produce the department-wide QSI for each quarter.

The quality assurance process provides a method to recognize successes and identify areas for improvement. QSI measures dimensions such as use of customer service skills, problem solving, interpersonal skills, clarity and accuracy of information, utilization of tools, helpfulness and final disposition of the call.

Quality assurance programs (QA) are relatively new to the 911 industry. Many centers still do not have formal programs. The Emergency Medical Services pioneered the use of QA as part of their response protocol system. The newer 911 phone systems include QA modules. While there are no standard performance targets for QA scores, the concept of systematically reviewing performance and identifying gaps is a best practice for risk management, and a requirement for certain accreditation programs.

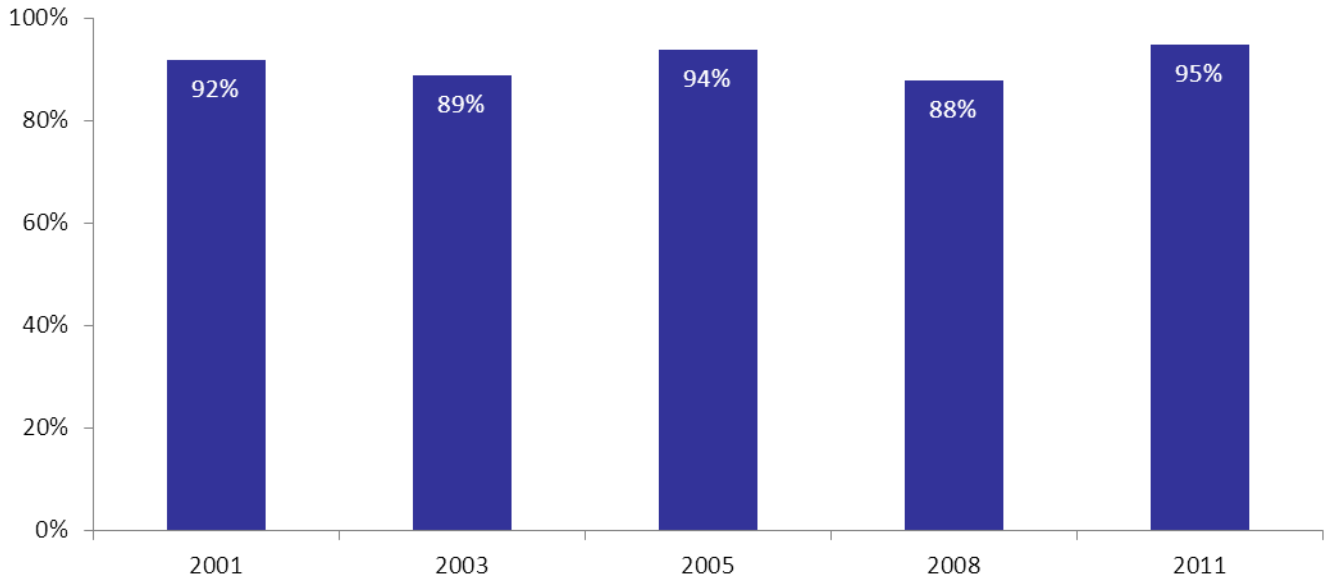
What will it take to achieve the target?

Continued emphasis on quality assurance and consistent monitoring plus attention to training in areas where deficiencies occur will ensure progress in this area.

Resident Survey Measures on the next page...

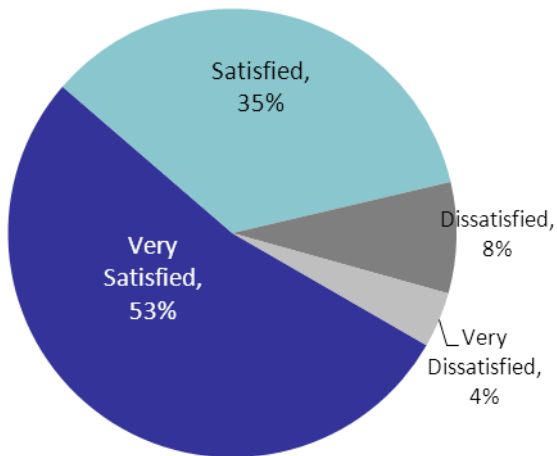
Satisfaction with Professionalism Shown by 911 Agents

Source: 2001 through 2011 Resident Surveys



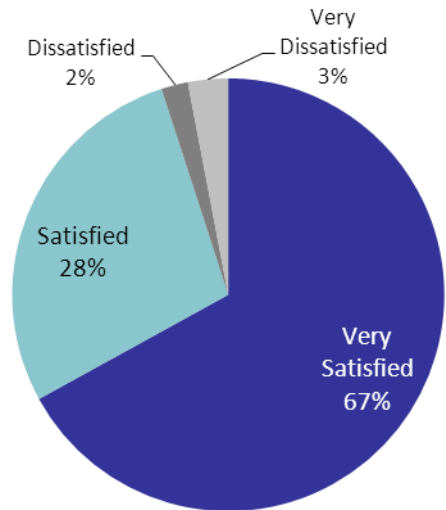
Professionalism Shown by 911 Agents, 2008

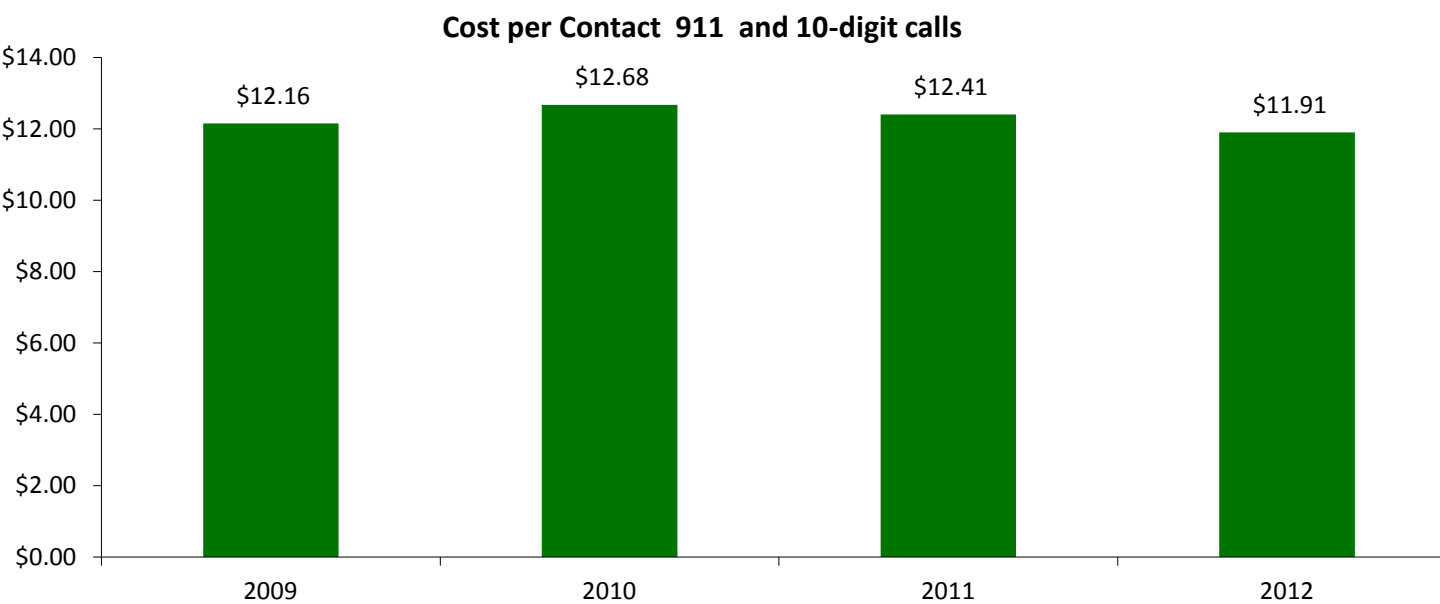
Source: 2008 Resident Survey



Professionalism Shown by 911 Agents, 2011

Source: 2011 Resident Survey



**Why is this measure important?**

Although 911 Center work is often “life and death” and thus priceless, it still exacts a financial cost that must be managed.

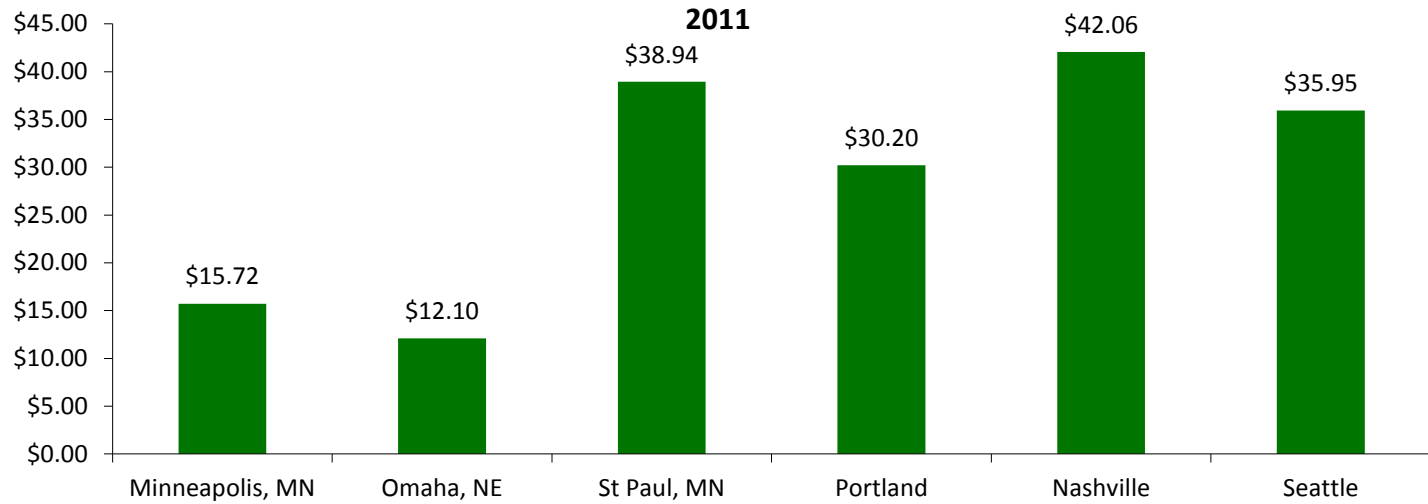
What will it take to achieve the targets?

911 Cost per Contact is derived from the operating budget divided by the number of contacts (911 and 10-digit calls) processed. Changes in either factor will result in a lower or higher cost per contact. Call volume increased .95% in 2012. Since 911 must continue to operate 24 hours a day, 365 days a year, with a high level of quality, and since 911 has no ability to generate revenue or to regulate the call volume received, it is difficult to arrive at a firm target for this measure.

911 continues to seek innovation in staffing, technology, and call processing to influence this measure to the extent possible.

Cost per 911 Call

2011



Why is this measure important?

This comparison shows how much it costs to process a 911 call received in a 911 dispatch center in comparable Metropolitan areas. By performing this comparison, we can gather information about what other cities are doing differently from Minneapolis to control costs and learn about best practices.

It is important to note that there are as many 911 center configurations as there are cities: no two are the same. Service levels vary between them as well; a low cost per contact center like Omaha may have a service level below the national standard.

City	Population Served by the PSAP	2011 Operating Budget	Number of Staff	911 call volume	10-Digit Call Volume	\$ per citizen	Cost per 911 Call	Cost per Total Calls	Service Level
Minneapolis, MN	382,578	\$ 7,250,948	78	461,162	123,224	\$18.95	\$15.72	\$12.41	88.0%
Omaha, NE	518,577	\$ 5,294,282	74	437,375	110,472	\$10.21	\$12.10	\$9.66	90.7%
St Paul, MN	509,320	\$11,877,284	143	305,015	489,175	\$23.32	\$38.94	\$14.96	98.0%
Portland, OR	583,820	\$14,000,000	98	463,645	477,252	\$23.98	\$30.20	\$14.88	94.0%
Nashville, TN	636,000	\$15,917,000	170	378,437	734,799	\$25.04	\$42.06	\$14.30	6 Sec.
Seattle, WA	620,778	\$18,800,000	146	523,000	305,000	\$30.28	\$35.95	\$22.71	96.3%
Hennepin County	451,004	\$14,096,950	91	235,904	221,465	\$31.26	\$59.76	\$30.82	96.0%

****Note:** Hennepin County budget and FTE includes radio shop functions and other functions not directly related to the PSAP 911 call answering and dispatching.